



United States  
Department of  
Agriculture

Soil  
Conservation  
Service

Salt Lake City,  
Utah



# Utah Water Supply Outlook

February 1, 1986



# Foreword

## How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of precipitation, temperature, soil moisture and antecedent streamflow data. These data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes available. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast value about one out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow course locations on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

## For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the offices listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado (New Mexico)	2490 West 26th Ave., Denver, CO 80211
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	50 South Virginia Street, Third Floor, Reno, NV 89505
Oregon	1220 Southwest 3rd Ave., 16th Floor, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82602

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Saskatchewan, and N.W.T. — The Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta, T3C 1A6.

# Utah Water Supply Outlook

and

## Federal – State – Private Cooperative Snow Surveys

### **Issued by**

Wilson Scaling  
Chief  
Soil Conservation Service  
Washington, D. C.

### **Released by**

Francis T. Holt  
State Conservationist  
Soil Conservation Service  
Salt Lake City, Utah

### **In cooperation with**

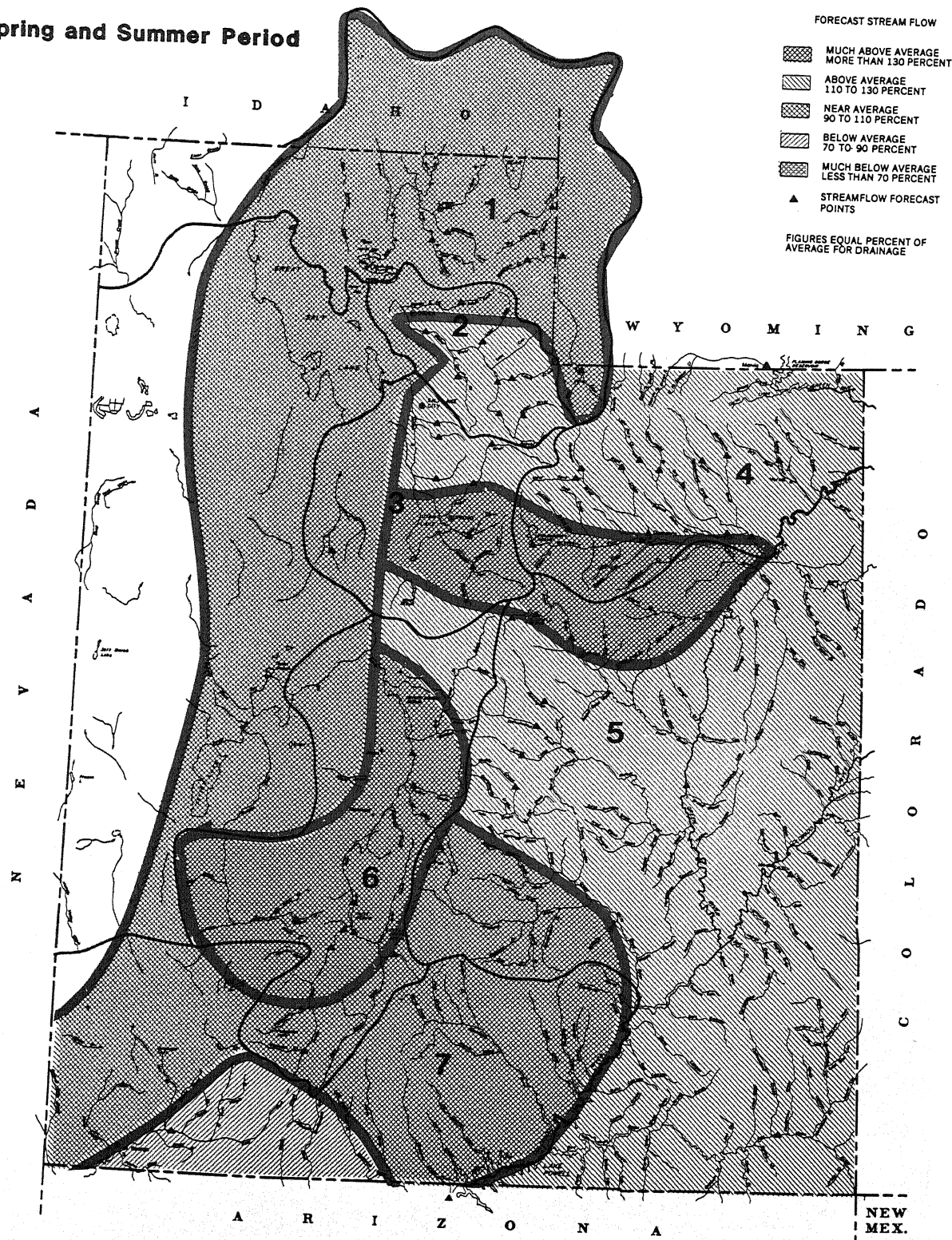
Utah State Department of Natural Resources	
Robert L. Morgan	D. Larry Anderson
State Engineer	Director
Division of Water Rights	Division of Water Resources

### **Prepared by**

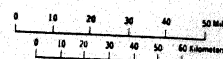
Jon G. Werner  
Snow Survey Supervisor  
Soil Conservation Service  
125 So. State St., Fed. Bldg.  
P. O. Box 11350  
Salt Lake City, Utah 84147

# Streamflow Prospects for Utah

Spring and Summer Period



- 1 BEAR RIVER BASIN
- 2 WEBER & OGDEN WATERSHEDS IN UTAH
- 3 UTAH LAKE, JORDAN RIVER & TOOELE VALLEY
- 4 UNITAH BASIN & DAGGET SCD'S
- 5 CARBON, EMERY, WAYNE, GRAND, & SAN JUAN CO.
- 6 SEVIER & BEAVER RIVER BASINS
- 7 E. GARFIELD, KANE, WASHINGTON, & IRON CO.





## GENERAL OUTLOOK

### SUMMARY:

Spring and summer streamflow forecasts have had to be reduced from the levels forecast a month ago. The majority of forecasts are still near to much above average but some exceptions could lead to water shortages by the end of the irrigation season if the dry trend of the last two months continues.

### SNOWPACK:

Snowpack on the watersheds of the state increased much less than normal in January. The Bear and Weber basins increased about 75%, central and eastern basins about 50% and the extreme southwest less than 10% of the normal January increase. Southwestern Utah is now at 71% with the other basins of the state ranging upward to 119% of the February 1 average on the Uinta Mountains.

### PRECIPITATION:

January precipitation at mountain stations was 30 to 80% below average across the State. Seasonal (October through January) precipitation, however, remains near to much above average ranging from 93% in the southwest to 143% on the southeastern Utah drainages.

### RESERVOIRS:

Stored water in 25 key irrigation reservoirs in Utah as of the end of January was 133% of average and 87% of total usable capacity. Prospects for filling are very good again this year in most areas of the state.

### STREAMFLOW:

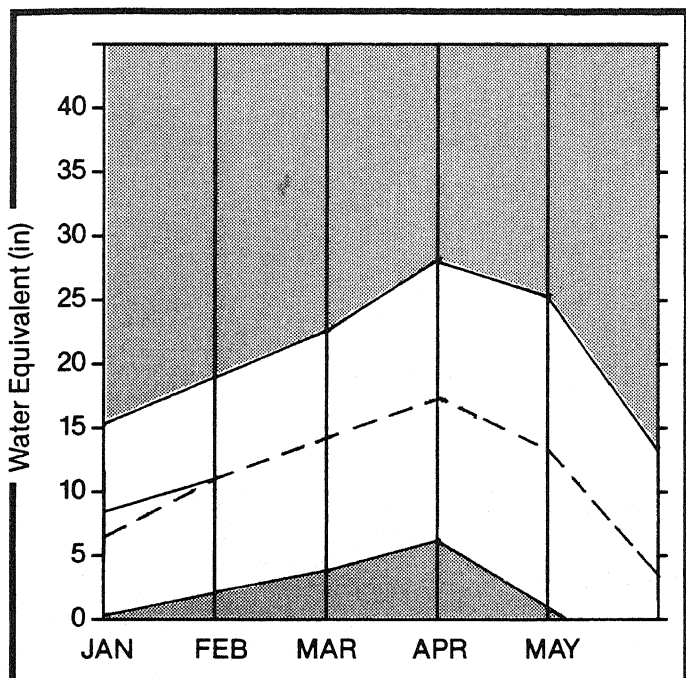
Water supply forecasts have generally dropped from the volumes forecast last month but remain near to well above average on nearly all streams. Forecasts range from 80% for the Virgin near Hurricane to 346% for the Sigurd to Gunnison reach of the Sevier.

*Forecasts prepared for this bulletin represent cooperative efforts of the Soil Conservation Service and the National Weather Service in an effort to provide the best possible service to water users and managers.*



# Bear River Basin

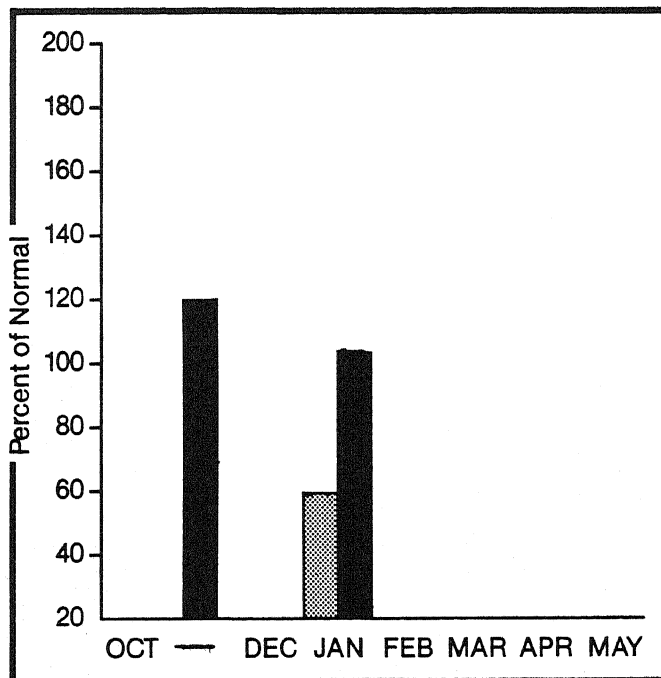
**Mountain snowpack\* (inches)**



\*Based on selected stations

Maximum  Average   
Minimum  Current 

**Precipitation\* (percent of normal)**



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snowpack on the Bear River Watershed as a result of below normal precipitation during January has fallen by 31 percentage points from the levels measured last month. The Bear is 103% of the February 1 average and the Logan is 94% of normal for the first of February. Streamflow forecasts now range from 95% to 132% of average. Mountain precipitation was only 58% of normal for January but the total for the water year is still 105% of average. Reservoir storage is 109% of average and 74% of capacity.

For more information contact your local Soil Conservation Service office:  
Tremonton Field Office 801-257-5403  
Logan Field Office 801-753-5616

# BEAR RIVER BASIN

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOW FLOW (CFS)
BEAR RIVER near UT-WY Stateline	APR-JUL	110.0	118.0	107	135	84	1550		
BEAR near Woodruff	APR-JUL	139.0	135.0	97	145	60			
WOODRUFF CREEK near Woodruff	APR-JUL	17.3	17.0	98	127	69	250		
BOO CREEK near Randolph	APR-JUL	5.3	7.0	132	189	75	55		
BEAR near Randolph	APR-JUL	110.0	110.0	100	161	39			
THOMAS FORK near Stateline	APR-SEP	35.0	35.0	100	100	100			
SMITHS FORK near Border	APR-SEP	119.0	120.0	100	123	82			
BEAR RIVER near Haver	APR-SEP	310.0	297.0	95	131	67			
LOGAN RIVER near Logan	APR-JUL	116.0	118.0	101	126	79	990		
BLACKSMITH FORK near Hyrum	APR-JUL	51.0	55.0	107	151	73			
LITTLE BEAR RIVER near Paradise	APR-JUN	38.0	41.0	107	163	53	504		
CUB RIVER near Preston	APR-JUL	46.8	45.0	96	115	68			

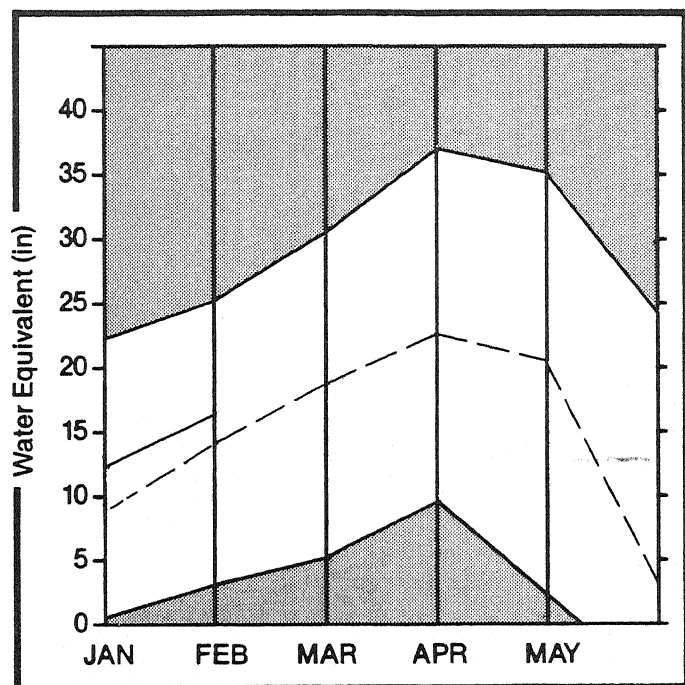
RESERVOIR STORAGE					(1000AF)					WATERSHED SNOWPACK ANALYSIS				
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **				WATERSHED	NO. COURSES AVE. D	THIS YEAR AS %						
		THIS YEAR	LAST YEAR	AVE.				LAST YR.	AVE.					
BEAR LAKE	1421.0	1057.7	1077.2	970.3	BEAR RIVER, UPPER IN UTAH	5	102	106						
HYRUM	15.3	10.3	10.3	10.3	BEAR RIVER, LOWER IN UTAH	10	102	104						
PORCUPINE	11.3	7.0	3.6	2.9	BEAR RIVER DRAINAGE IN UT	15	102	105						
WOODRUFF NARROWS	55.8	36.0	55.5	---	BEAR RIVER, UPPER (above	11	116	101						
WOODRUFF CREEK	3.5	1.7	3.4	---	BEAR RIVER, LOWER (below	15	112	107						
					BEAR RIVER DRAINAGE	25	114	105						
					LOGAN RIVER	5	92	94						
					RAFT RIVER	0	0	0						
					BEAR RIVER BASIN	25	110	103						

\*Corrected for upstream diversions or changes in reservoir  
Average is for 1940-1949



\*Corrected for upstream diversions or changes in reservoir storage.  
Average is for 1941-80 period.



# Weber & Ogden Watersheds

Mountain snowpack\* (inches)

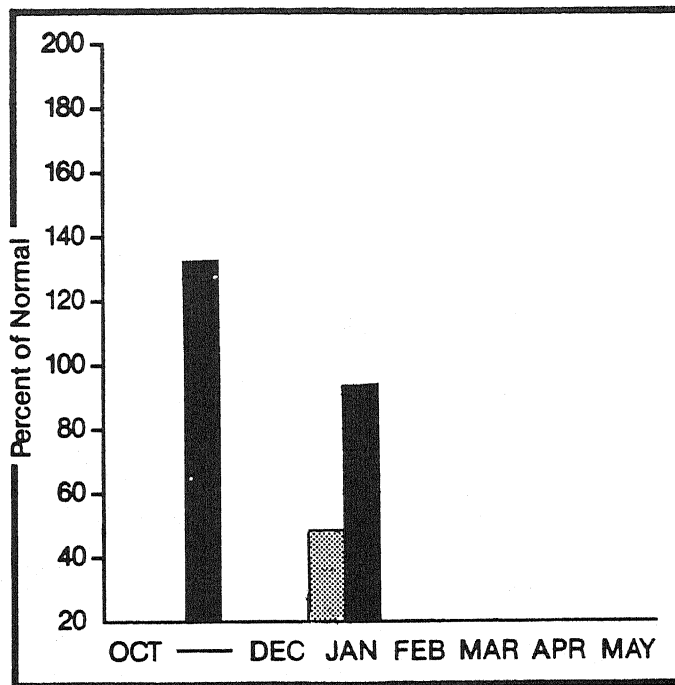


\*Based on selected stations


Maximum   
Minimum 


Average   
Current 

Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation 

Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snowpack on the Weber River Watershed as a percent of average has decreased by 31% during January due to below normal precipitation. The Weber has 117% and the Ogden 114% of normal February 1 snowpack. Streamflow Forecasts have decreased from the levels forecast a month ago but remain above average ranging from 103% to 152% of average. Mountain precipitation was only 48% of the January average but remains at 96% for the water year accumulation. Reservoir storage is 130% of average for February 1.

For more information contact your local Soil Conservation Service office:  
Layton Sub Office 801-544-9144

# WEBER & OGDEN WATERSHEDS in Utah

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOW FLOW (CFS)	LOW DATE
WEBER RIVER near Ogden	APR-JUN	102.0	132.0	129	161	101	1850			
BACKPORT RESERVOIR inflow	APR-JUN	111.0	150.0	135	179	98				
CHALK CREEK near Coalville	APR-JUN	36.0	55.0	152	192	117	800			
WEBER RIVER near Coalville	APR-JUN	119.0	165.0	138	176	107				
LOST CREEK near Drivden	APR-JUN	15.6	20.1	128	186	77				
EAST CANYON CREEK near Morgan	APR-JUN	25.0	29.0	116	160	76				
WATERSHED CREEK near Porterville	APR-JUL	18.4	20.0	108	174	43				
SOUTH FORK OGDEN RIVER near Huntavil	APR-JUN	57.0	60.0	105	137	72				
PINEVIEW RESERVOIR inflow	APR-JUN	115.0	120.0	104	130	76				
ECMO RESERVOIR inflow	APR-JUN	145.0	189.0	130	168	90				
WEBER RIVER at Gateway	APR-JUN	300.0	381.0	127	160	96				
FARMINGTON CREEK near Farmington	APR-JUL	8.2	8.5	103	171	37				

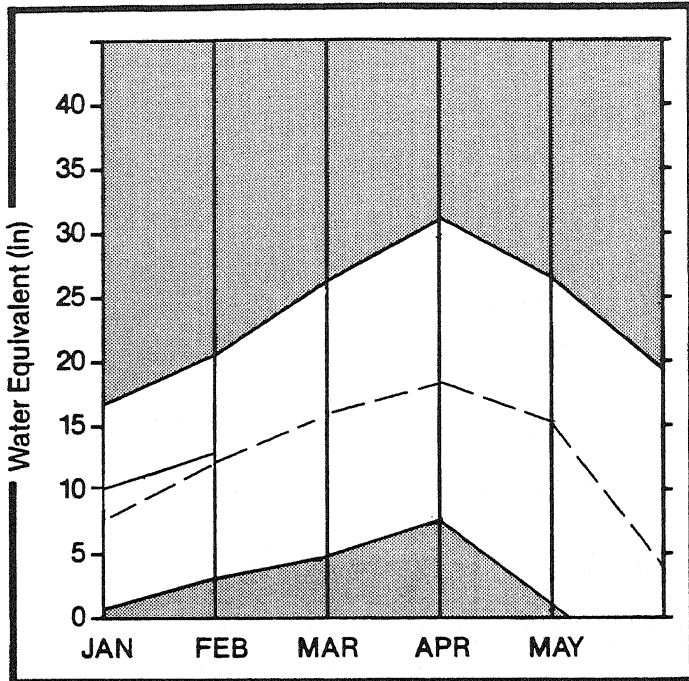
RESERVOIR STORAGE (1000AF)				WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVE. D
		THIS YEAR	LAST YEAR	AVE.		THIS YEAR AS % OF LAST YR. AVERAGE
CAUSEY	6.9	1.8	5.7	2.2	OGDEN RIVER	4
EAST CANYON	48.1	41.4	39.0	34.7	WEBER RIVER	12
ECMO	73.9	58.6	48.6	45.8	WEBER & OGDEN WATERSHEDS	16
LOST CREEK	20.0	14.9	14.9	13.1		
PINEVIEW	110.1	75.2	54.8	49.6		
BACKPORT	60.9	34.6	40.4	31.9		
WILLARD BAY	165.5	148.6	148.2	110.6		

\*Corrected for upstream diversions or changes in reservoir storage.  
Average is for 1961-80 period.



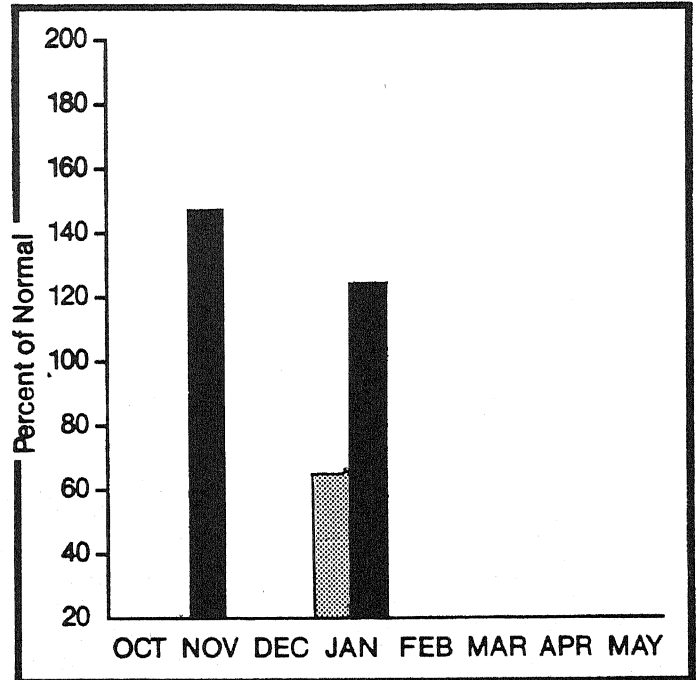
# Utah Lake, Jordan River & Tooele Valley

**Mountain snowpack\* (inches)**







\*Based on selected stations


**Precipitation\* (percent of normal)**



\*Based on selected stations

Maximum   
Minimum 

Average   
Current 

Monthly precipitation   
Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snowpack on the watershed draining into the Great Salt Lake through the Jordan River has decreased as a percent of average by 30 to 40% during January because of abnormally low precipitation. Snowpack over the entire basin is now 100% of the February 1 average. Most streamflow forecasts showed decreases of 5 to 10 percent from last month. Mountain precipitation was 67% of average for January but water year totals are still 127% of average. Reservoir storage at the end of January was 153% of average.

For more information contact your local Soil Conservation Service office:  
Midvale Field Office 801-524-4373  
Provo Field Office 801-377-5580

# UTAH LAKE, JORDAN RIVER & TOOELE VALLEY

## STREAMFLOW FORECASTS

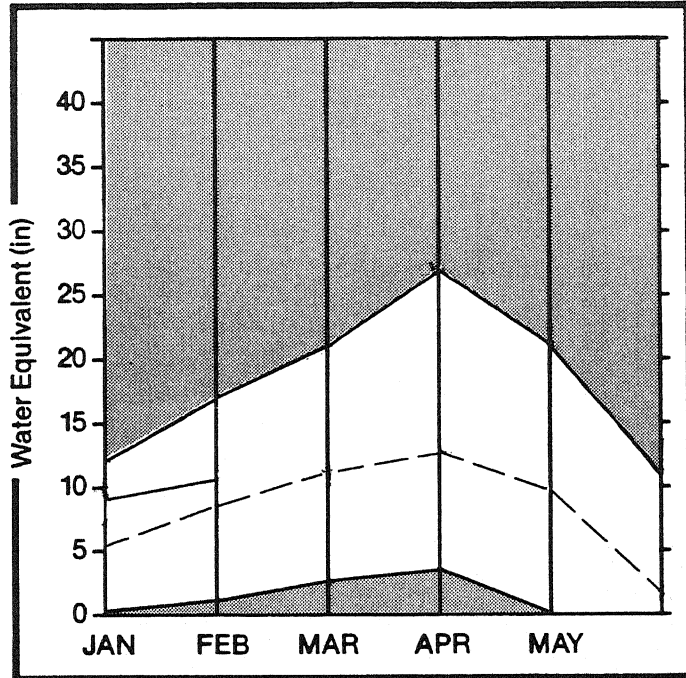
FORECAST POINT	FORECAST PERIOD	50 YR. AVE. (1000AF)	HIST. PROBABLE (1000AF)	HIST. PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOW FLOW (CFS)	LOW DATE
PROVO near Hallsdale	APR-JUL	106.0	130.0	122	158	92				
PROVO below Deer Creek Dam	APR-JUL	118.0	155.0	131	164	92				
AMERICAN FORK near American Fk.	APR-JUL	118.0	40.0	33	57	15				
HOBBIE CREEK near Springville	APR-JUL	18.7	28.0	149						
STRAWBERRY RESERVOIR inflow	APR-JUL	72.0	95.0	132	157	104				
PAVSON CREEK near Pavson	APR-JUL	6.2	8.3	133						
UTAH LAKE inflow	APR-JUL	238.0	400.0	168	202	132				
LITTLE COTTONWOOD CRK near SLC	APR-JUL	38.0	46.0	121	139	103				
BIG COTTONWOOD CRK near SLC	APR-JUL	37.0	48.0	129	146	114				
PAPLEY'S CREEK near SLC	APR-JUL	14.8	20.0	135	169	108				
HILL CREEK near SLC	APR-JUL	5.8	8.5	146	190	103				
EMIGRATION CREEK near SLC	APR-JUL	3.7	4.4	118						
CITY CREEK near SLC	APR-JUL	7.7	10.0	129	156	104				
SETTLEMENT CREEK near Tooele	APR-JUL	2.3	2.2	95	174	43				
SOUTH WILLOW CREEK near Grantsville	APR-JUL	3.0	2.7	90	167	33				
VERNON CREEK near Vernon	APR-JUN	0.8	0.9	114	175	55				

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	** USEABLE STORAGE LAST YEAR	** AVE.	WATERSHED	NO. COURSES AVE.D	THIS YEAR AS % OF LAST YR. AVERAGE
DEER CREEK	149.7	134.0	118.2	94.3	PROVO RIVER & UTAH LAKE	9	96 103
GRANTSVILLE	4.3	1.9	---	---	PROVO RIVER	4	111 110
SETTLEMENT CREEK	1.0	0.8	0.0	0.5	JORDAN RIVER & GREAT SALT	6	87 96
STRAWBERRY-ENLARGED	951.4	509.0	271.7	---	TOOELE VALLEY WATERSHEDS	1	80 115
UTAH LAKE	883.9	1002.0	1166.6	648.6	UTAH LAKE, JORDAN RIVER &	16	91 100
VERNON CREEK	0.6	0.2	0.0	0.5			

\*Corrected for upstream diversions or changes in reservoir storage.  
Average is for 1961-90 period.

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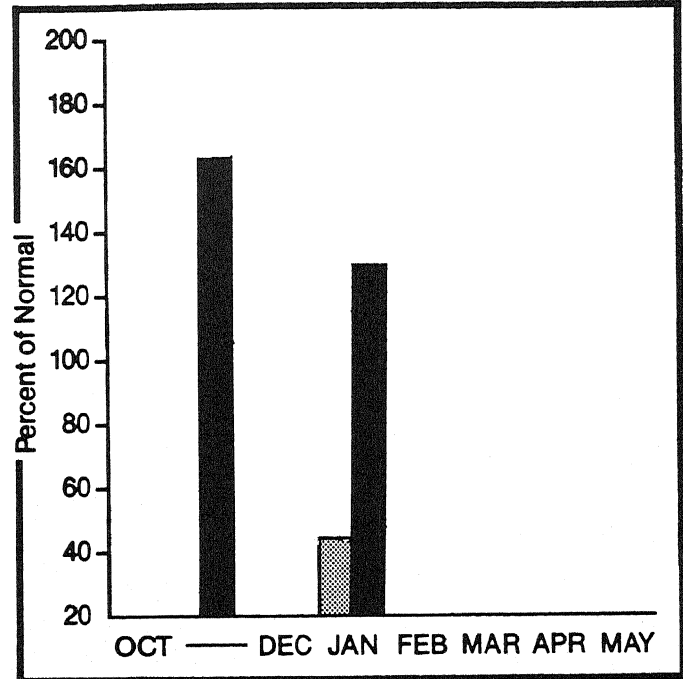
Mountain snowpack\* (inches)



\*Based on selected stations

Maximum  Average   
Minimum  Current 

Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## 

Snowpack on the Uintas, although still above the February 1 average on most drainages, experienced losses as a percent of average of from 28% to 82% during January due to below average precipitation. Snowpack ranges from 95% on Ashley Creek to 142% of the February 1 average on the Lakefork River. Forecasts decreased 12 to 27% from January 1 levels. Precipitation for January was only 45% of average. Water year precipitation now stands at 131%. Reservoir storage is well above average.

For more information contact your local Soil Conservation Service office:  
Roosevelt Field Office 801-722-4621

# UINTAH BASIN & DAGGET SCD'S

## STREAMFLOW FORECASTS

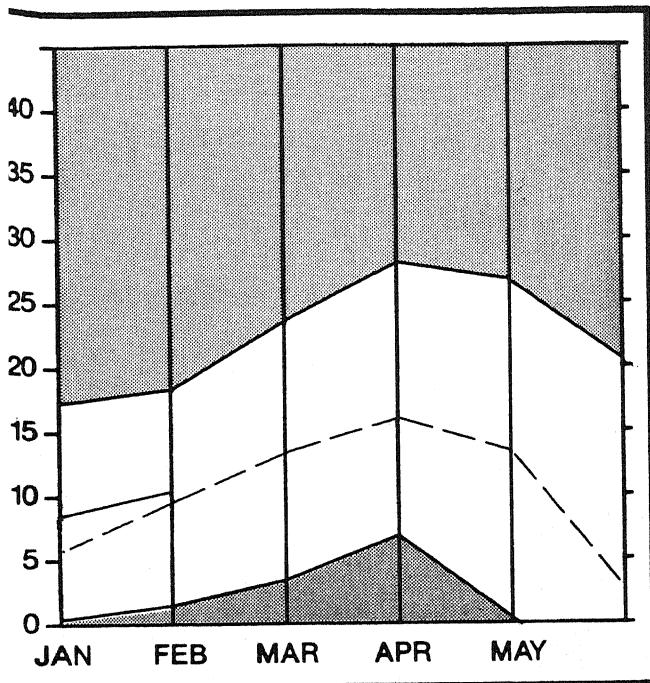
FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOW FLOW (CFS)	LOW DATE
DUCHESNE RIVER near Tabiona	APR-JUL	105.0	130.0	123	146	99				
DUCHESNE RIVER near Duchesne	APR-JUL	189.0	235.0	124	150	99				
STRAWBERRY RIVER at Duchesne	APR-JUL	58.0	80.0	137	164	114	750			
POCK CREEK near Mountain Home	APR-JUL	93.0	115.0	123	153	102	1700			
CURRENT CREEK near Fruitland	APR-JUL	20.0	26.0	130	155	105				
LAKEFORK RIVER near Mountain Home	APR-JUL	70.0	85.0	121	151	96				
YELLOWSTONE RIVER near Altonah	APR-JUL	65.0	80.0	123	158	88				
DUCHESNE near Mvton	APR-JUL	205.0	325.0	158	195	112				
WHITE ROCKS RIVER near Whiterocks	APR-JUL	58.0	75.0	129	169	90				
UINTAH RIVER near Neola	APR-JUL	86.0	115.0	133	176	92				
DUCHESNE near Randlett	APR-JUL	257.0	425.0	165	239	91				
WEST FORK DUCHESNE RIVER near Hanna	APR-JUL	26.0	32.0	123	150	96				
HENRY'S FORK near Manila	APR-SEP	48.0	60.0	125	169	92				
BLACK'S FORK near Millburne	APR-JUL	90.0	100.0	111	149	78				
FLAMING GORGE RESERVOIR inflow	APR-JUL	1248.0	1375.0	110	140	83				
ASHLEY CREEK near Vernal	APR-JUL	51.0	60.0	117	147	94				

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVE. D	THIS YEAR AS % OF LAST YR. AVERAGE	
FLAMING GORGE	3749.0	3014.0	3309.8	---	UPPER GREEN RIVER in UTAH	8	105	103
MOON LAKE		NO REPORT			ASHLEY CREEK	2	92	95
RED FLEET	26.0	20.0	19.0	---	BLACK'S FORK RIVER	3	108	111
STEINAKER	33.3	31.3	30.2	19.7	SHEEP CREEK	2	114	103
STARVATION	165.3	147.0	123.4	113.0	DUCHESNE RIVER	10	105	129
STRAWBERRY-ENLARGED	951.4	509.0	271.7	---	LAKE FORK-YELLOWSTONE CRE	3	116	142
					STRAWBERRY RIVER	4	104	121
					UINTAH-WHITEROCKS RIVERS	2	93	119
					UINTAH BASIN & DAGGET SCD	19	105	119

\*Corrected for upstream diversions or changes in reservoir storage.  
Average is for 1961-80 period.

# Carbon, Emery, Wayne, Grand, and San Juan Co.

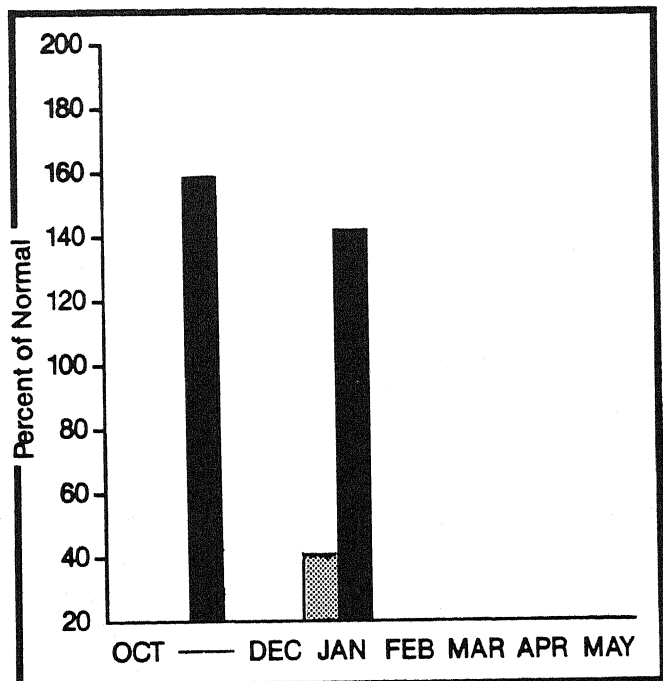
Mountain snowpack\* (inches)



\*Based on selected stations

Minimum ———  
 Maximum ———  
 Average ———  
 Current ———

Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation ———  
 Year to date precipitation ———

## WATER SUPPLY OUTLOOK:

Snowpack on Southeastern Utah drainages as a percent of average has lost between 30 and 60 percentage points due to much below normal precipitation during January. Snowpack ranges from 88 to 120% of the February 1 average. Streamflow forecasts have generally decreased from last month and now range from 100 to 146% of average. Precipitation at mountain stations was only 40% of average in January but water year accumulation is still 143% of normal. Reservoir storage is 130% of the February 1 average.

For more information contact your local Soil Conservation Service office:  
 Price Field Office 801-637-0041

# SEVIER & BEAVER RIVER BASINS

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOW FLOW (CFS)	LOW DATE
SEVIER at Hatch	APR-JUL	48.0	52.0	108	154	71				
SEVIER near Circleville	APR-JUL	38.0	50.0	131	132	132				
SEVIER near Kingston	APR-JUL	29.0	32.0	110	207	38				
ANTHONY CREEK near Anthony	APR-JUL	10.3	10.0	97						
E F SEVIER near Kingston	APR-JUL	18.9	25.0	132	206	95				
SEVIER b/w Piute Dam	APR-JUL	45.0	58.0	128	216	64				
CLEAR CREEK near Sevier	APR-JUL	18.9	22.0	116	116	116				
SIGURD to GUNNISON	APR-JUL	26.0	90.0	346	450	254				
KINGSTON to VERMILLION DAM	APR-JUL	45.0	70.0	155						
VERMILLION DAM to GUNNISON	APR-JUL	35.0	90.0	257						
SALINA CREEK at Salina	APR-JUL	11.9	22.0	184						
SEVIER nr Gunnison	APR-JUL	54.0	145.0	268						
CHALK CREEK near Fillmore	APR-JUL	16.4	17.7	107	159	61				
CHICKEN CREEK near Levan	APR-JUL	3.5	4.2	120	171	86				
OAK CREEK near Oak City	APR-JUL	1.6	1.7	106	188	13				
EPHRAIM CREEK near Ephraim	APR-JUL	14.9	19.0	127						
PLEASANT CREEK near Pleasant	APR-JUL	8.6	11.0	127						
SALT CREEK near Nephi	APR-JUL	13.5	13.5	100	185	15				
BEAVER RIVER near Beaver	APR-JUL	23.0	32.0	139	204	87	347			
NORTH CREEK near Beaver (combined N	APR-JUL	14.6	19.0	130	219	41				
HINERSVILLE RESERVOIR inflow	APR-JUN	8.9	17.0	191	258	124				

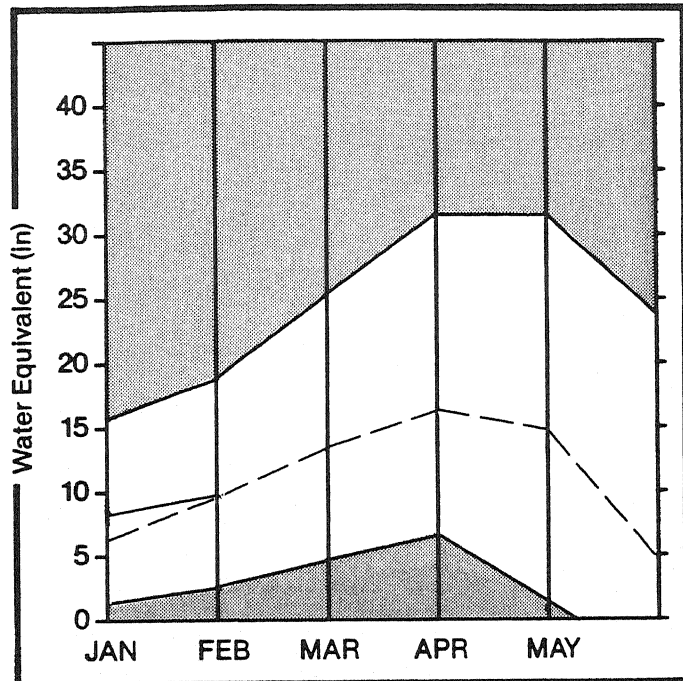
RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	LAST YEAR	** AVE.	WATERSHED	NO. COURSES AVE.D	THIS YEAR AS % OF LAST YR. AVERAGE
GUNNISON	18.2	16.8	15.0	11.7	UPPER SEVIER RIVER (south	11	64 84
HINERSVILLE (RkvFd)	26.0	19.1	22.2	11.2	EAST FORK SEVIER RIVER	4	72 84
OTTER CREEK	52.5	50.2	48.2	27.5	SOUTH FORK SEVIER RIVER	7	81 84
PIUTE	71.8	62.4	61.9	36.9	LOWER SEVIER RIVER (inclu	12	98 110
SEVIER BRIDGE	236.0	206.2	210.4	101.1	BEAVER RIVER	3	126 151
PANQUITCH LAKE	22.3	19.1	20.0	---	SEVIER & BEAVER RIVER BAS	26	89 104

\*Corrected for upstream diversions or changes in reservoir storage.  
Average is for 1961-80 period.



# Sevier & Beaver River Basins

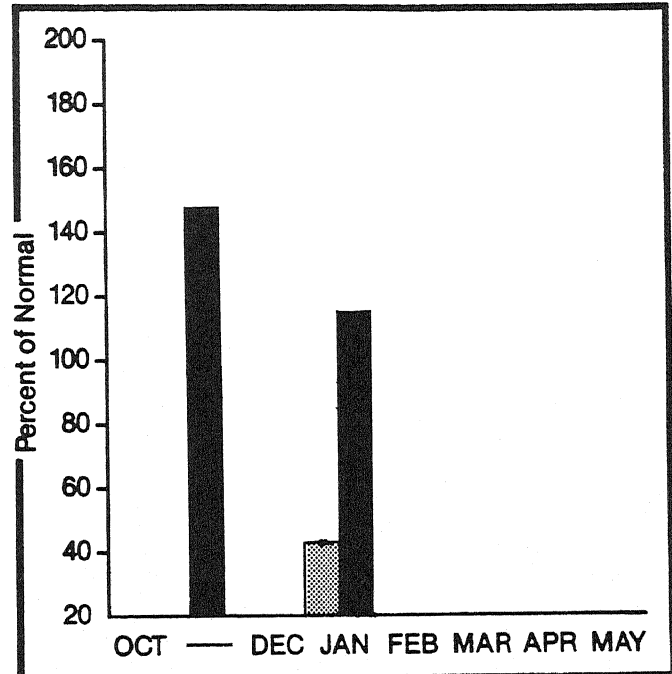
Mountain snowpack\* (inches)





\*Based on selected stations

Maximum  Average   
Minimum  Current 

Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snowpack on the Sevier River watershed increased only 40% as much as it normally should in January because of much below average precipitation. The Sevier River Basin including the Beaver River watershed has 106% of normal snowpack for February 1. The Beaver River watershed alone has 151% of average February 1 snowpack. Streamflow forecasts are generally less than those of last month ranging from 97 to 346% of average. Water year precipitation is 115% of normal. Reservoir storage is 170% of average.

For more information contact your local Soil Conservation Service office:  
Richfield Field Office 801-896-6261  
Fillmore Field Office 801-743-6655

**CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.**

STREAMFLOW FORECASTS

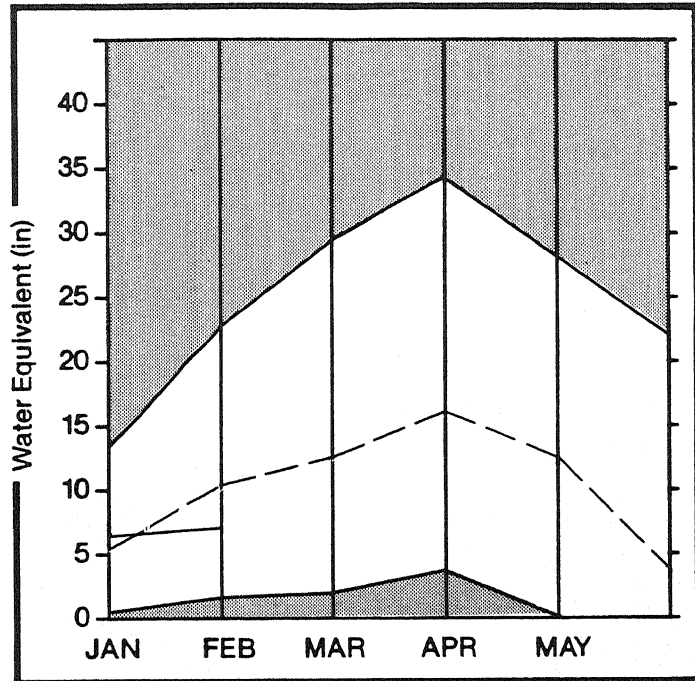
FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	HIST. PROBABLE (1000AF)	HIST. PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOW FLOW (CFS)	LOW DATE
GOOSEBERRY CREEK near Scofield	APR-JUL	10.7	13.5	126	168	84				
SCOFIELD RESERVOIR inflow	APR-JUL	38.0	52.0	136	171	111				
PRICE near Hainer	APR-JUL	63.0	92.0	146						
HUNTINGTON CREEK near Huntington	APR-JUL	49.0	60.0	122	159	96				
COTTONWOOD CREEK near Orangetown	APR-JUL	47.0	55.0	117	155	79				
FERRON CREEK near Ferron	APR-JUL	37.0	45.0	121	162	81	510			
MUDDY CREEK near Emery	APR-JUL	18.5	21.5	116	162	70	175			
COLORADO near Cisco, UT	APR-JUL	3046.0	4000.0	131	180	92				
GREEN near Green Rv., UT	APR-JUL	3016.0	3775.0	125	158	92				
HILL CREEK near Moab	APR-JUL	5.5	6.5	118	164	73				
NAVAJO RESERVOIR inflow	APR-JUL	729.0	800.0	110	161	70				
SAN JUAN near Bluff, UT	APR-JUL	995.0	1100.0	110	168	65				
SEVEN MILE CREEK near Fish Lake	APR-JUL	6.5	6.5	100	154	46				

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** THIS YEAR	USEABLE STORAGE LAST YEAR	** AVE.	WATERSHED	NO. COURSES AVE.D	THIS YEAR AS % OF LAST YR. AVERAGE
HUNTINGTON NORTH	3.9	2.8	2.7	2.3	PRICE RIVER	3	91 100
JOE'S VALLEY	54.6	45.0	49.5	43.6	SAN RAFAEL RIVER	7	97 120
KEN'S LAKE	2.3	1.1	0.6	—	MUDDY RIVER	2	117 113
HILL SIDE	16.7	10.3	10.1	3.5	FREMONT RIVER	3	95 93
NAVAJO	1696.0	1250.0	1465.0	790.8	LASAL MOUNTAINS	0	0 0
SCOFIELD	65.8	46.5	49.0	31.3	BLUE MOUNTAINS	2	78 88
					CARBON, EMERY, WAYNE, GRA	23	84 99

\*Corrected for upstream diversions or changes in reservoir storage.  
Average is for 1961-80 period.

# E. Garfield, Kane, Washington, & Iron Co.

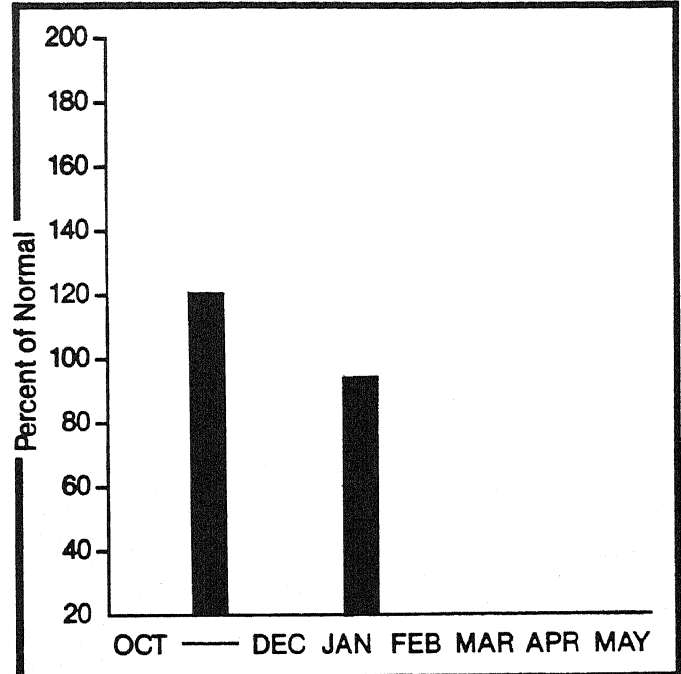
**Mountain snowpack\* (inches)**





\*Based on selected stations

Maximum  Average   
 Minimum  Current 

**Precipitation\* (percent of normal)**



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snowpack on all drainages surveyed is below normal for February 1. Enterprise to New Harmony drainages are only 39% of average, Coal Creek is 79% and the Escalante River is 94%. All courses in the E. Garfield, Kane, Washington and Iron County area average 71% of normal. Streamflow forecasts range from 80 to 127%. Precipitation at mountain stations was extremely light in January with only 19% of normal recorded. Accumulation of precipitation for the October 1 through January period is 93% of average.

For more information contact your local Soil Conservation Service office:  
 Cedar City Field Office 801-586-2429

E. GARFIELD, KANE, WASHINGTON, & IRON Co.

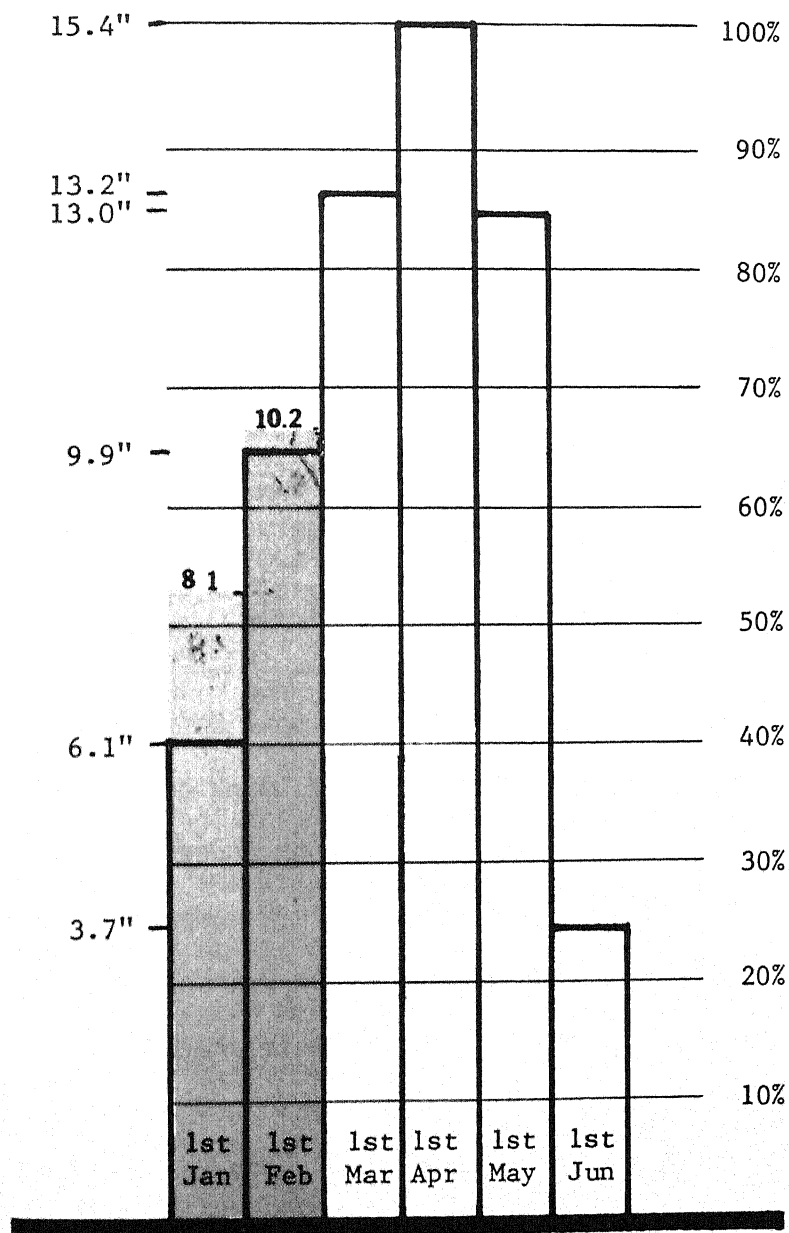
STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOW FLOW (CFS)	LOW DATE
VIRGIN near Hurricane	APR-JUL	62.0	50.0	81	127	35				
SANTA CLARA near Pine Valley	APR-JUL	5.3	5.5	103	113	113				
COAL CREEK near Cedar City	APR-JUL	18.4	19.6	106	152	76				
LAKE POWELL Inflow	APR-JUL	7462.0	9500.0	127	170	89				

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVE.	WATERSHED	NO. COURSES AVE.D	THIS YEAR AS % OF LAST YR.	AVERAGE
BLUE MESA	830.0	465.0	557.0	379.4	VIRGIN RIVER	5	56	73
LAKE POWELL	25002.0	22750.0	21989.0	---	PARDWAN	4	66	73
					ENTERPRISE TO NEW HARMONY	2	26	39
					COAL CREEK	3	63	79
					ESCALANTE RIVER	1	78	94
					E. GARFIELD, KANE, WASHIN	9	59	71

\*Corrected for upstream diversions or changes in reservoir storage.  
Average is for 1961-80 period.

# Utah Snowpack Progress



## Statewide

Snow water equivalent in inches is compared to maximum\* seasonal amounts at 100 %.

\* Monthly S.W.E. averages for each course in the state is accumulated and averaged by month

## **NOTE TO RECEPIENTS OF THE UTAH WATER SUPPLY OUTLOOK**

The results of traditional once a month manual snow course measurements will no longer be published in this report.

In keeping with the newly established west-wide snow survey report format, this data will be summarized, published and mailed each fall.

Please contact your nearest Soil Conservation Service office for the current manual snow course information or for assistance in obtaining access to the Services' Centralized Forecast System via computer terminal and telephone communication. Current snow and precipitation data and analysis are available daily by this method.



# The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

## State

Utah State University  
Utah State Department of Natural Resources  
Division of Wildlife Resources  
Division of Water Resources  
Division of Water Rights  
Bear River Commissioner  
Price River Commissioner  
Provo River Commissioner  
Sevier River Commissioners  
Spanish Fork River Commissioner  
Utah Lake and Jordan River Commissioner

## Federal

U.S. Department of Agriculture  
Soil Conservation Service  
Forest Service  
U.S. Department of Commerce  
NOAA, National Weather Service  
U.S. Department of Interior  
Bureau of Reclamation  
Geological Survey  
National Park Service

## Municipality

Manti  
Salt Lake City

## Public

Beaver River Water Users Association  
Board of Canal Presidents - Jordan River  
Central Utah Conservancy District  
Emery Canal and Reservoir Company  
Moon Lake Water Users Association  
Ogden River Water Users Association  
Provo River Water Users Association  
Strawberry Water Users Association  
Sevier River Water Users Association  
Weber River Water Users Association  
Weber Basin Conservancy District

Other organizations and individuals furnish  
information for the snow survey reports.  
Their cooperation is gratefully acknowledged.

All programs and services of U.S. Dept.  
of Agriculture are available to everyone  
without regard to race, creed, color, sex,  
age, handicap, or national origin.